



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,751	08/21/2003	Toshiro Hirohata	50356-164	7629

7590 12/23/2004
McDERMOTT, WILL & EMERY
600 13th Street, N.W.
Washington, DC 20005-3096

EXAMINER

KEEHAN, CHRISTOPHER M

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,751

Applicant(s)

HIROHATA ET AL.

Examiner

Christopher M. Keehan

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/21/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/873,396.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/21/03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION***Examiner's Comments***

The claim language "for prestressed concrete, which is applied to the surface of the tendon" appears to be drawn to the future intended use of the composition. It is not clear, as applicant is claiming a composition, how the future intended use of the composition materially affects the overall claimed composition. Therefore, this claim language has not been given patentable weight.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 19 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,623,558 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other for the following reasons. Claim 19 of the instant application is drawn to a sheath-covered tendon for prestressed concrete having a structure to which a curable

Art Unit: 1712

composition is applied. Claim 1 of the cited patent is drawn to a sheath-covered tendon for prestressed concrete having a structure to which a curable composition is applied.

The composition of claim 19 is more narrow than the composition in claim 1, and therefore, claim 1 encompasses the subject matter of claim 19.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 8-11, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsuda et al. (6,444,272 B1). Regarding claims 1-3, Matsuda et al. disclose a curable composition comprising an epoxy resin and a moisture-type curing agent, more specifically an epoxy of bisphenol A or F (col.2, line 22-col.3, line 54), and a ketimine curing agent (col.3, line 55-col.4, line 67). Although Matsuda et al. do not appear to specifically disclose the instantly claimed inherent properties of viscosity and number of days required to cure, it appears these properties are inherently disclosed by Matsuda et al. because the materials of Matsuda et al. are the same as that claimed by applicant, and the same materials would have resulted in a product with the same inherent properties, absent evidence to the contrary. Where the claimed and prior art

Art Unit: 1712

products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433. See also *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).

Regarding claims 4 and 5, Matsuda et al. disclose wherein the ketimine compound is formed as claimed (col.4, lines 12-18), in an amount included in the range as claimed (Table 1, Examples).

Regarding claim 8, Matsuda et al. disclose an amount of curing agent as claimed (Table 1, Examples).

Regarding claims 9-11 and 17, Matsuda et al. disclose a dehydrating agent, which can also act as a thickener, in an amount included in the range as claimed by applicant (col.5, lines 1-37 and Table 1, Examples).

Art Unit: 1712

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 12, 13, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Ando et al. (5,889,124). Regarding claims 1-3, Ando et al. disclose a curable composition comprising an epoxy resin and a moisture-type curing agent, more specifically an epoxy of bisphenol A or F (col.5, lines 30-49), and a ketimine curing agent (col.6, lines 1-62). Although Ando et al. do not appear to specifically disclose the instantly claimed inherent properties of viscosity and number of days required to cure, it appears these properties are inherently disclosed by Ando et al. because the materials of Ando et al. are the same as that claimed by applicant, and the same materials would have resulted in a product with the same inherent properties, absent evidence to the contrary. Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 562 F.2d at

Art Unit: 1712

1255, 195 USPQ at 433. See also *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).

Regarding claim 4, Ando et al. disclose the process of forming the ketimine as claimed (col.6, lines 27-30).

Regarding claim 5, Ando et al. disclose an amount of curing agent included in the range as claimed by applicant (col.6, lines 63-65).

Regarding claims 12, 13, and 16, Ando et al. disclose a curing accelerator (col.6, lines 37-43) in an amount that can be included in the range as claimed by applicant (col.7, lines 56-58).

Claims 1-3, 5-8, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Iizuka et al. (6,387,310 B1). Regarding claims 1-3, Iizuka et al. disclose a curable composition for the same use as that of applicant comprising an epoxy resin bisphenol A (col.3, lines 4-19) and a curing agent that can be a ketimine (col.3, lines 32). Iizuka et al. do not appear to teach or disclose using both together. Brindell et al. disclose an epoxy resin composition comprising a hardener comprising ketimine and an amine. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added both the ketimine and the latent hardener. Although Matsuda et al. do not appear to specifically disclose the instantly claimed inherent properties of viscosity and number of days required to cure, it appears these properties are inherently disclosed by Matsuda et al. because the materials of Matsuda et al. are the same as that claimed by applicant, and the same materials would have resulted in a product with

Art Unit: 1712

the same inherent properties, absent evidence to the contrary. Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433. See also *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).

Regarding claim 5 and 8, Iizuka et al. disclose an amount of curing agent that is included in the range as claimed by applicant (col.3, lines 45-47).

Regarding claims 6 and 7, Iizuka et al. disclose an alcohol included in the range as instantly claimed (col.4, lines 18-25).

Regarding claim 18, Iizuka et al. disclose a prestressed tendon with the composition as claimed (col.5, lines 25-41).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda et al. (6,444,272 B1). Matsuda et al., as applied above, are as set forth and incorporated herein. Matsuda et al. do not appear to specifically disclose applying the composition to a tendon. However, Matsuda et al. do disclose applying the composition to concrete (col.6, lines 46-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the composition as taught by Matsuda et al. to a variety of surfaces, including tendons, because Matsuda et al. teach that the composition can be applied to concrete surfaces, and tendons are concrete surfaces.

Claims 12-15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iizuka et al. (6,387,310 B1) in view of Brindell et al. (4,148,950). Iizuka et al., as applied above, are as set forth and incorporated herein. Iizuka et al. disclose the possible uses of a ketimine or other various hardeners, such as dicyandiamide and amines in amounts included in the range as claimed by applicant (as set forth above). Iizuka et al. do not appear to teach or disclose using both types together. Brindell et al. disclose an epoxy resin composition comprising a hardener comprising ketimine and

Art Unit: 1712

amine functionality. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added both the ketimine and amine functional hardener as taught by Brindell et al. to the composition as taught by Matsuda et al. because Brindell et al. teach that using a ketimine and amine hardener produces a composition with increased worklife due to delayed curing, a characteristic favorable to applicant, resulting in a more versatile product.

Regarding claim 19, the Iizuka et al. combination does not appear to specifically disclose the instantly claimed properties. The Iizuka et al. combination does disclose a sheath-covered tendon for prestressed concrete with the claimed curable composition (as set forth above). However, as the materials of the Iizuka et al. combination does disclose at least similar materials, it would have been obvious for the Iizuka et al. combination to have at least similar properties because at least similar materials would have yielded a composition with at least similar properties, absent evidence to the contrary.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Keehan whose telephone number is (571) 272-1087. The examiner can normally be reached on Monday-Friday, from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on 571-272-1302. The fax phone

Art Unit: 1712

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Keehan

December 20, 2004

*Christopher Keehan
Ad Unit 1712
Clerk*